

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0013] with the following amended paragraph:

[0013] A technical effect of some configurations Some configurations of the present invention is to track a measurand (e.g., vibration magnitude or phase) and, using the measurand, generate a result or raise an alarm when one or more configurable criteria are met (e.g., a statistically defined step change of the measurand). The invention also An additional technical effect of the present invention is to provide provides one or more time based criteria to qualify the data before raising an alarm. Some configurations permit a user to add additional preconditions to the rule to qualify data before raising an alarm. As used herein, a "measurand" is a measurable parameter of an industrial process.

Please replace paragraph [0023] with the following amended paragraph:

[0023] Thus, in some configurations 100 of the present invention and referring to Figure 2, a technical effect of the present invention is achieved by a parameter measurement 102 is latched being latched by latch 104 at suitable intervals, e.g., once every four seconds, or at any other interval suitable for observing and monitoring the industrial process. Latch 104 feeds a FIFO (first-in, first-out) buffer 106, which holds a predetermined number of values of the latched parameter. For example, and not by way of limitation, some configurations of the present invention include a 20 element FIFO, which holds the last 20 latched values of the parameter. Other configurations hold a different number of latched values, and in some configurations of the present invention, the size of FIFO buffer 106 is configurable to allow tuning of the sensitivity to sudden spikes in the parameter value. (For example, a longer buffer is less sensitive to short spikes in the parameter value.) Some configurations of the present invention determine one or more statistical functions (e.g., standard deviation and average) of the latched values for each interval and provide this information to a limit module 108, which utilizes the one or more determined statistical functions to determine one or more alert limits. Module 108 may also

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utilize configurable inputs, as described in conjunction with the various equations disclosed above. In some configurations of the present invention, the statistical functions and alert limits are redetermined each time a new value of the parameter is latched and shifted into buffer 106. Also, in some configurations, the statistical values are not necessarily standard deviation and mean, but may include other suitable statistical measures, such as median or mode, or another measure of parameter variance.